UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/683,853	10/10/2003	James I. Percival	1348/110	1765

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EXAMINER
NAMAZI, MEHDI

ART UNIT	PAPER NUMBER
2188	

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/683,853	PERCIVAL
	Examiner	Art Unit	
	Mehdi Namazi	2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 September 2004</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some *   c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/10/2004</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claim 1-17 have been considered but are

moot in view of the new ground(s) of rejection.

2.   The terminal disclaimer filed on 9/29/2004 disclaiming the terminal portion of any

patent granted on this application which would extend beyond the expiration date of

patent No. 6,370,615 has been reviewed and is accepted. The terminal disclaimer has

been recorded.

Declaration

3.   The declaration under 37 CFR 1.132 filed 11-10-2004 is insufficient to overcome

rejection based on Super Cache V1.2 User and Installation Guide A Turbo Ware

Product (Revision/update Information V1.2-08; Turbo System International S.A.) as set

forth in this office action because:

Applicant has provided an copy of the License Agreement and cited section 5 of

the Agreement (see the Declaration filed 7-18-97 at paragraph 6). However, the

License Agreement is not itself determinative of the public use issue, but is one factor to

be considered along with the time, place and circumstances of the use which show the

amount of control the inventor retained over the invention. In this regard see MPEP &

2133.03(a)(ii). There is no evidence showing the amount of control that the inventor

retained over the invention or the SuperCache Guide as part of the licensing

agreement.

Furthermore, the reference "EEC ups ante in VMS disk caching arena with three-tiered package for VAXclusters " (Digital Review, March 16, 1992, v9 n6 p6(1)) appears to indicate that EEC had introduced a network version of the "SuperCache" product by March 1992. This appears to contradict paragraph 3 of the declaration filed 7-18-97, and current declaration filed 11-10-2004. Comment and explanation is required.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, and 6, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claims 1, and 6, "maintaining exclusive write access control over the specifically addressed data in the cached I/O device" is not supported by the specification.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4, 5, 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by the

I/O Express Software Product (as thought by the I/O Express User's Guide and the I/O

Express Technical Report) from Express software, Glendale, CA.

As per claims 4, and 9, I/O Express teaches connection of a plurality of nodes in

a clustered system. Each node contains a computer and has its own memory and

cache ("a plurality of computers...each computer having a memory"). See "Reports",

SPO TR 92.32 (16 Sept 19992) at page 5. the nodes of the cluster interact together

and share resources, such as disk and tape storage facilities ("plurality of I/O

devices......"). See "reposts" SPO TR 92.32 (16 Sept 1992) at page 5.

As per claims 5, 10, 11, 12, "Guide" teaches at page 2-6, when "a node joins the

V Axcluster, caching cluster-wide is disabled automatically until I/O Express on the new

node". "Guide" also teaches on page 2-8 that when caching is disabled for all disks in

the system (/DCOFF_SYS) or cluster ("DCOFF_CLU), that the cache is purged

("invalidated"). Therefore, when a new node (computer") is added to the cluster

("network"), the caching on other nodes is disabled, and the data in the caches on other

nodes is purged ("invalidated").

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

the I/O Express Software Product (as thought by the I/O Express User's Guide and the

I/O Express Technical Report) from Express software, and further in view of

Supercache V1.2 User and Installation Guide A TurboWare Product (Revision/Update

Information V1.2-08; Turbo System International S.A.).

As per claims 7, 13, I/O Express teaches connection of a plurality of nodes in a

clustered system. Each node contains a computer and has its own memory and cache

("a plurality of computers...each computer having a memory"). See "Reports", SPO TR

92.32 (16 Sept 19992) at page 5. the nodes of the cluster interact together and share

resources, such as disk and tape storage facilities ("plurality of I/O devices......"). See

"reposts" SPO TR 92.32 (16 Sept 1992) at page 5, "Guide" teaches at page 2-6, when

"a node joins the V Axcluster, caching cluster-wide is disabled automatically until I/O

Express on the new node". "Guide" also teaches on page 2-8 that when caching is

disabled for all disks in the system (/DCOFF_SYS) or cluster ("DCOFF_CLU), that the

cache is purged ("invalidated"). Therefore, when a new node (computer") is added to

the cluster ("network"), the caching on other nodes is disabled, and the data in the

caches on other nodes is purged ("invalidated").

As per claims 7, 8,13, I/O Express does not teach a plurality of caches each

being of a different data bucket size. Supercache teaches utilizing three caches ("data

buckets") and qualifiers for the different caches in the cache start command (page 4-3,

section 4.2.2.1.1. it would have been obvious to one having ordinary skill in the art at

the time the invention was made to utilize a plurality of caches and associated qualifiers

for the different caches, as taught by Supercache, because Supercache teaches in the

first line of section 4.2.2.1.1 that three caches is more efficient instead of a less effective

single cache.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mehdi Namazi whose telephone number is 571-272-

4209. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone

number for the organization where this application or proceeding is assigned is 703-

872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Mehdi Namazi
January 9, 2005

MANO PADMANABHAN
SUPERVISORY PATENT EXAMINER